W1TKZ

# The Spark Gap

SEPTEMBER 1984

Book IX Vol IX

Official Journal of the Wellesley Amateur Radio Society

## President's Message

by Nels Anderson, K1UR

Fall is here and time to start up the club's activities once again. I hope everyone had a good summer as I did. The club was not entirely dormant during the summer either as we had several activities which are reported later in the newsletter.

The meetings this month are involved in regrouping the club for the upcoming year. The first meeting will be all business, including passing the budget and calendar for 1984/85. Perhaps even more important though, we will be decided on the future of the W1TKZ repeater at this meeting. During the past few months our repeater committee investigated our needs in a repeater and what is available from manufacturers. During the summer we went ahead and bought duplexers; and now we need to decide on the rest of the system. Since the equipment we buy will be with us for many years this is an important decision. These issues are well presented by Tom Kinahan, N1CPE, later in this issue.

The second meeting of the month will be social, with a look at the upcoming year and a recap slide show of last year's activities and especially Field Day.

On a more serious note, there is something else the club needs and that is more involvement from the members. We have vacancies due to resignation in two of our most important offices, namely Education Chairman and Activities Chairman. Our education program is essential to the continued health of the club as we must have new people to take over for those who move on. The Education Chairman does not necessarily have to teach the classes but must organize them and generate publicity. Our many varied activities are what makes the Wellesley Amateur Radio Society so much fun to belong to, but these activities do not just happen. We need someone who will take the responsibility to organize them, so finding an Activities Chairman is also essential.

Last year over fifty new people joined the club bringing the membership over one hundred. Certainly out of all of you members there is someone for each of these vital jobs. Please come forward and volunteer!

## Dues Dues Dues...

With the start of the new club year it is time to pay your dues. They remain at $8.00 this year. You can also sign up additional family members for only $2.00 each.

You may pay your dues during one of the meetings this month or mail them to the club treasurer, C.J. McDonald, WB1BUM, 48 Hale Street, Newton, Mass. 02164. Please use the membership form and please fill it out so that the officers can know more about what you are interested in. Last year many people left it blank, and this really isn't helpful.

**MEETINGS THIS MONTH:**
September 6, 1984, at 7:30 p.m.
September 20, 1984, at 7:30 p.m.
211 Washington St., Wellesley

## "New Tickets"

Several people received new call-signs since the last issue of the Spark Gap. Duke Hoang traded in KG6GS for KB1NJ. Rita Baker, after upgrading to Technician, received N1DDI, replacing KA1KJN.

## OFFICIAL BULLETIN

Number 58, dated July 20, 1984:

The FCC released on July 20 a second Report and Order on the HF phone band expansion docket, PR Docket Number 82-83, and also granted the petition, RM 4288, filed by Randall F. Soball, KH6XX, allowing phone operation on 7075 to 7100 kHz in the state of Hawaii.

Effective 0001 UTC, September 1, 1984, these will be the new HF radiotelephone subbands:

3750-3775 kHz Extra Class
3775-3850 kHz Advanced/Extra
3850-4000 kHz General/Advanced/Extra

21200-21225 kHz Extra Class
21225-21300 kHz Advanced/Extra
21300-21450 kHz General/Advanced/Extra

28300-29700 kHz General/Advanced/Extra

With regard to the 40 meter band, FCC concurs with ARRL that phone band expansion here would be detrimental to CW operations. However, the Commission will allow phone operation on 7075 to 7100 kHz in Hawaii and other areas near Region 3, and Alaska.

Remember that these new phone privileges are not available until 0001 UTC, September 1, 1984.

In summary, the Commission adopted the plan as submitted in the ARRL's comments, with the addition of expanded phone operation at 7075 to 7100 kHz in certain geographic areas near Region 3. Details will be in the September QST.

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Number 63, dated August 6, 1984:

The FCC has received two petitions for rulemaking requesting that the 220 MHz band be shared with land mobile radio services. Remember, these are petitions for rulemaking and not FCC notices of proposed rulemaking. See QST, March 1982, page 66, for comment procedures.

RM 4829, filed by the Land Mobile Communications Council, LMCC, principally seeks frequencies in the 800 MHz band, but says that portions of the 220 to 225 MHz band could also be used for land mobile radio services.

RM 4831, filed by a manufacturer of amplitude compandored sideband equipment, Sideband Technology, Inc., asks the Commission for 216 to 222 MHz for narrow band ASCB channels for private and government land mobile systems.

The comment deadlines for both petitions are August 29, with reply comments due on or before September 13.

## OFFICERS

PRESIDENT:
Nels Anderson, K1UR, 872-5259
VICE PRESIDENT:
David Curry, K1TK, 237-2450
RECORDING SECRETARY:
Tom Kinahan, N1CPE, 899-5924
CORRESPONDING SECRETARY:
Allan Bacon, K1BA, 749-4382
TREASURER:
C.J. McDonald, WB1BUM, 332-6091
FUND RAISING:
Kevin Kelly, WA1YHV, 242-0341
OPERATING ACTIVITIES:
Volunteer Needed!
EDUCATION CHAIRMAN:
Volunteer Needed!
STATION MANAGER:
Bob Drapeau, KT1K, 883-1132
REPEATER COMMITTEE:
Tom Kinahan, N1CPE, 899-5924

# The Spark Gap

Official Journal of the Wellesley Amateur Radio Society

EDITOR:

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THE "SPARK GAP" IS A MONTHLY PUBLICATION OF THE WELLESLEY AMATEUR RADIO SOCIETY. ITS PRIMARY PURPOSE IS TO KEEP ITS MEMBERS ABREAST OF CURRENT HAPPENINGS, FCC RULES AND REGULATIONS CHANGES, AND TO LIST EQUIPMENT OFFERED FOR SALE OR TRADE BY MEMBERS. MEMBERS ARE ENCOURAGED TO CONTRIBUTE TO THE "SPARK GAP" AND MAY SEND THEIR ARTICLES TO THE EDITOR. ITEMS PRINTED IN THE "SPARK GAP" MAY BE REPRINTED BY OTHER AMATEUR RADIO PUBLICATIONS PROVIDED THE AUTHOR AND THE "SPARK GAP" ARE GIVEN CREDIT.

THE WELLESLEY AMATEUR RADIO SOCIETY IS A NON-PROFIT ORGANIZATION DEDICATED TO THE PROMOTION OF AMATEUR RADIO THROUGH INSTRUCTION, FELLOWSHIP, DEMONSTRATION, AND ENCOURAGEMENT OF PARTICIPATION. ANNUAL MEMBERSHIP IN THE SOCIETY IS $8.00. THE CLUB YEAR RUNS SEPTEMBER 1 TO AUGUST 31. AMATEUR NOVICE AND GENERAL CLASSES ARE CONDUCTED REGULARLY AT NO COST. TO ENROLL IN A CLASS, OR GAIN INFORMATION ABOUT THE SOCIETY IN GENERAL, WRITE:

THE WELLESLEY AMATEUR RADIO SOCIETY
211 WASHINGTON STREET
WELLESLEY HILLS, MASS. 02181


# MINUTES

Meeting of July 19, 1984:

The meeting was opened at 7:38 p.m. by President Nels Anderson, K1UR.

Tom Kinahan, N1CPE, gave a report on the Repeater Committee's research. Although he has not received answers from all the companies he contacted he has the following results:

1. A new repeater will be around $3000.
2. Wacom has given us prices on two duplexers that will work, with prices of $442.50 and $547.50. The less expensive one would require separate receive and transmit antennas.
3. Repeater fund totals $340.
4. Excess in club treasury could be used to help pay for repeater.

After some discussion, Bill Hanlon, N1ADY, proposed that we purchase the more expensive Wacom duplexer to get the repeater upgrade process started. After discussion of the motion, it was passed 8 to 5.

Mort Cohan, KA1IU, proposed that the club look into incorporating, which is felt to be a simple process and would provide the club legal protection. After discussion, the motion to form a committee to look into incorporation was passed unanimously. Mort, Bill Hanlon, N1ADY, and John Antes, KB1EB, volunteered for the committee.

Art Thompson, KA1ENP, announced that he has volunteered to take over as Radio Officer under Wellesley Civil Defense.

Art also discussed the upcoming change to volunteer examinations and noted that we must be prepared to have groups to organize our classes as well as to give exams.

A report was given on our participation in the Tinman Triathlon.

In general discussion of plans for the upcoming year, Mort Cohan, KA1IU, suggested that we might move the Message Fair away from the Christmas season because he anticipates continued problems securing a good location.

The meeting was closed at 8:33 p.m. (Thanks to Gary Weissel, KA1JWE, and Allan Bacon, K1BA, for taking the minutes of this meeting.)

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Meeting of August 16, 1984:

The meeting was started at 7:48 p.m. by President Nels Anderson, K1UR, with 8 in attendance.

The proposed budget was discussed item by item, and agreed to.

The calendar of events was discussed with little change from last year. It was suggested that if we have trouble getting a message fair location in December we move it to January.

Tom Kinahan, N1CPE, presented information on repeaters but because of the low turnout no action was taken.

The meeting finished at 8:16 p.m. (Thanks to Gary Weissel, KA1JWE, for taking the minutes of this meeting.)

# REPEATER

by Tom Kinahan, N1CPE

The following is a report on our needs for a repeater and what is available in the market.

Needs:

We would like to have a reliable, modern 2 meter repeater that has telephone control of repeater functions, and the possibility of upgrading the system to incorporate links, and phone patch. We also desire output power at about 50 Watts due to 1.5 dB loss in duplexers.

Options:

1) Repair present system, refitting receiver with transmitter and using present controller. Cost: nil. We have the expertise.

2) Spectrum Repeaters: SCR77 Repeater: No telephone control, basic stripped down system. Similar to what we now have. (Not particularly legal.) Cost: 15W Model - $2045 list, $1430 dealer. 30W Model - $2149 list, $1510 dealer.

SCR1000 Repeater: You add the goodies. Would suffice for our needs. Standard build is 30 watts. Cost: 30W Model + Phone control - $3851 list, $2694 dealer. 75W Model + Phone control - $4558 list, $3189 dealer.

3) Hamtronics: This company sells components to build your own repeater such as id'ers, transmitters, receivers. They put it together in a package and call it a repeater. The standard power out of their transmitter is 16-18W, not enough for our purposes so I have added the 50W amp. Cost: Model R144 repeater $680 kit, $880 wired and tested, 50W amp $150/$230, DTMF decoder phone interface $180/$320, total: $1010/$1430.

4) Kendecom Inc. Micro Control Specialties (The Groveland Repeater): This company, in my opinion is the Cadillac of Repeaters. They have 3 models with the top of the line having those frills that you really can't find a use for, the middle just right, and the bottom being the bottom.

Cost: Mark 4CR (The one with voice!). It has auto patch, reverse patch, 20-25W output (we could live with it), Telephone control. $2495/$2945 with 75 watt amp.

Mark 3CR (The one I think is best) Same as above except no voice messages 15-20W output, Telephone control. $1695/$2145 with 75 watt amp.

LR-1 The equivalent of the Spectrum SCR77, cut and dry simple (illegal?) no control, id. $1249/$1699 with 75 watt amp.

My Opinion: The best option for our need as stated above is the Kendecom Mark 3CR. This machine allows considerable upgrading. Hamtronics looks really good until you compare the receiver and transmitter specifications. You seem to get what you pay for. Spectrum seems to be priced high and you seem to get less.

This information was presented at the August 16, 1984 meeting but due to the lack of enough people to really make a good decision, we have put off discussion and votes until the first meeting of September. Please attend this meeting, as this is a large investment for our club, and we want everyones voice to be heard.

Any questions regarding this proposal, inquiries to see data sheets, or anything else, contact me on the air (147.03) or give me a call at home, after 6 pm at 899-5924.

See you all on September 6.

# Hamnews

An updated version of the Element 2 Novice Class questions has been completed by the FCC's Washington staff and is currently at the printing office. Availability of the questions is scheduled for mid to late August after which a review of the Element 3 questions will be undertaken. Elements 4A and 4B are slated for review next year.

Westlink Report, August 10, 1984

# VHF CONTEST

by Nels Anderson, K1UR

This year's June VHF QSO Party may not have brought the greatest band conditions ever, but it did bring the best weather ever. If you can remember back that far now that September is upon us, the weekend of June 9 and 10 was right in the middle of the big June heat wave. Record setting temperatures, bright sunshine, 100 degrees for several days in a row, remember? Well, while the rest of you were sweating it out back home, those of us up in Vermont were enjoying beautiful weather with temperatures peaking in the low 80's and light breezes making it very comfortable to be sitting outside working away at all that VHF DX. (I won't even spoil this wonderful description by mentioning that this was a banner year for black flies.)

Despite the wonderful weather we forced ourselves to do some operating. Band conditions were nothing special d there were none of the late in the ntest openings that often spice ings up late Sunday evening. For example, on two meters we didn't work one new section after the first six hours of the contest. Six meters did provide a few contacts to the mid-west but they were well spread out.

Most of our new equipment worked out very well. The Yaesu FT-726R's which were used both on six and two meters proved to be the best rigs we ever had especially in that they were not easily overloaded by the big guns on the adjacent mountains like all earlier rigs we tried were. We had improved amplifiers and thus higher power available on all bands but without any openings had little chance to prove their worth. Even with all the changes to the lower bands, 1296 was our most improved band this year, with Hank Ostrowski, VE3CGL, providing all the equipment including an 18 watt amplifier and 4 yagis. With this setup we made more than doubled our previous best effort on this band.

This year for the first time we had the use of commercial power instead of our old trusty generator. This worked out quite well providing a more stable voltage even with all the amplifiers on line.

We may not have won, but our score was very respectable as you can see:

| BAND: | QSOS: | SECTIONS: |
|---|---|---|
| 50 | 254 | 33 |
| 144 | 421 | 22 |
| 220 | 73 | 19 |
| 432 | 80 | 18 |
| 1296 | 26 | 14 |
| 10000 | 4 | 2 |

SCORE: 858 QSO'S
108 SECTIONS
116,100 POINTS

As usual in June, we operated in conjunction with the vintage sports car hill climb and provided operators for timing and safety communications. The nice weather helped this event as well, as they got in many runs up the mountain with few mishaps.

The participants in this year's June VHF QSO Party were: Tom Kinahan, N1CPE; Arnie Adelman, W1GCI; C.J. McDonald, WB1BUM; Dick Paret, WA1ZLQ; David Curry, K1TK; Dave Kent, N2AWG; Hank Ostrowski, VE3CGL; Hank Cross, W1OOP; Bill Downing, WA1PQY; Bill Hanlon, N1ADY; Duke Hoang, KB1NJ; Scott Nacey, WA1YOJ; Nels Anderson, K1UR.

# WARS NET

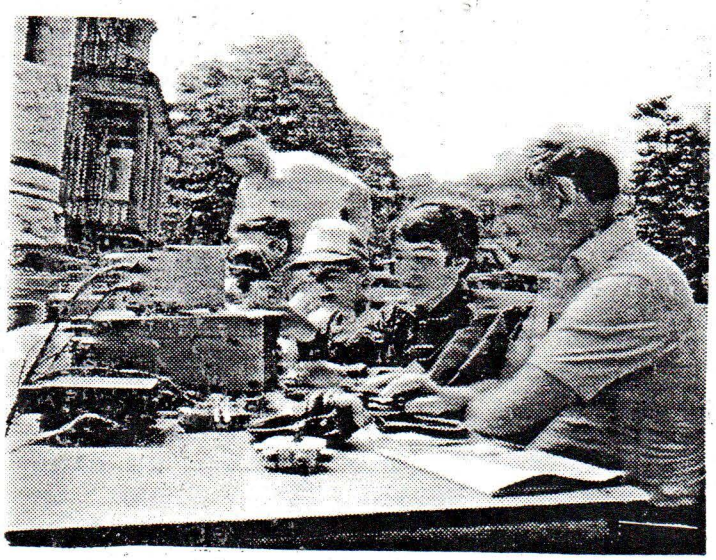
I would like to remind everyone of the club net held each Sunday evening at 7:00 p.m. on the club repeater W1TKZ/R, 147.63/03. The net is devoted to providing information on club activites and Amateur Radio news in general as well as giving members a chance to meet regularly. This fall we would like to spread around the net control duties, so if you are interested contact Nels Anderson, K1UR.

# FIELD DAY!

by Nels Anderson, K1UR

Field Day was held this year the weekend of June 23-24 on the lawn of the Wellesley Town Hall. During the daylight hours the weather was beautiful, sunny but not too warm. Only a light rain during the late night hours prevented it from being a perfect weekend, but inside the tent everything was dry and the rain really made little difference.

The operation began early Saturday morning as the equipment was gathered at the fire station and dragged to the town hall with Tom Kinahan's trusty Blazer. Antennas were assembled and untangled, tower sections bolted together and it looked like everything was going smoothly. Then we tried to get the tower up in the air. We really didn't have enough people to muscle it up and it just didn't want to go. Finally, after three or four tries and a pull from C.J. McDonald's pickup, the tower and antenna stood fourty feet over the site, ready to go.



The Field Day crew.

We managed to get on the air only a little late and with the antennas working well started getting some good contacts. The two stations were kept busy until suppertime when the smell of hamburgers on the grill made operating very difficult. The stations worked well throughout the weekend, even providing some DX contacts, mostly with Europe but one with Tahiti!

Very few people stayed overnight but we managed to keep a station going most of the time. As the sun came up Sunday morning more people began to reappear and operation continued to the 2:00 p.m. quitting time. Our trusty generator worked beautifully after almost a year of inactivity. In addition, we tried to make some natural power contacts with equipment provided by WB1BUM. C.J. brought a hand-cranked generator and matching transceiver which a number of people got a good workout on. Unfortunately, we were unable to make any contacts even though we were receiving O.K. and the wattmeter indicated we were getting power out. We also tried C.J.'s solar power system but unfortunately waited too long and there really wasn't the bright sunshine needed so we struck out here too.

Our final results for the weekend were as follows:

| BAND | CW | PHONE |
|---|---|---|
| 75 | | 116 |
| 40 | 19 | 82 |
| 20 | | 265 |
| TOTAL | 19 | 463 |

43 states
6 Canadian provinces
9 DX countries

The weekend was very enjoyable for those who participated and we once again proved our ability to operate in the field with emergency equipment. This year's participants included: KA1JWE, K1UR, N1CPE, KA1IKW, KA1LDV, KB1NJ, KT1K, WB1BUM, N1ADY, WA1HRV, WA1EQU, KA1LPF, KA1LQK, KA1IU, W1EOA, WA1YHV, KA1LQQ, KA1LQP, W1LMU, K1TK, N2AWG.

# Public Service

by Nels Anderson

Our big public service event of the summer was providing support for the first annual New England Tinman Triathlon. This event encompassed three athletic activities, a 1.2 mile swim in Morses Pond in Wellesley, a 56 mile bike race starting from the pond and going through Wellesley, Natick, Sudbury, Wayland, Concord, Lincoln, Maynard and Hudson, and finally a 13.1 mile run through Wellesley, Needham and Dover.

As if the stress from all this activity wasn't enough, July 15 also brought record high temperatures (high 90's) so it was very tough on the participants. Our primary purpose was to call for support in case anyone was hurt or had to drop out. In addition, many of our operators helped out at water stops or directing traffic. Surprisingly, very few of the athletes needed medical help and we only had two people picked up along the course. We still kept busy relaying requests for water and other supplies as well as reporting the progress of the race back to the organizers who were stationed at the finish line at Wellesley High School.

I would like to thank the following people who helped out with this event: Mike Kiron, N1CGF, who acted as net control at the High School. Along the course where: Bill Hanlon, N1ADY; Gary Weissel, KA1JWE; Mike Weissel, KA1IKW; John Schide, WB1BUV; Tom Kinahan, N1CPE; C.J. McDonald, WB1BUM; Allan Bacon, K1BA; Kevin Kelly, WA1YHV; Ken McNair, KA1ACX; and George Joubert, KA1JIP.

# CHUCKLE KORNER

from Overmodulation, Poinsetts ARC Ventura, Calif., via ARNS

If, working in a crowded band, you finally find a blank spot and call CQ, no one will hear you.

Two stations working the skip will destroy the ionized layers which make possible the skip in the first place.

If you tell a guy he is 599, he will start fading or QRM will be too heavy to copy him.

If you don't tell a guy he is 599, he will start fading or QRM will be too heavy to copy him.

If your antenna is too low, you won't work get good DX. If you put it up high enough, it will fall down.

If your antenna is not big enough, it won't work well. If you put up an antenna that is big enough, the neighbors will complain that you cause TVI.

If you are causing TVI, it will be the type that low and high pass filters won't cure.

If you are not causing TVI, it will be the type that low and high pass filters could cure.

# Hamnews

Raymond Kowalski warned Radio Amateurs to be concerned about the future of the Amateur Service if the use of simplex autopatches continues to spread. Speaking at the ARRL National Convention, the FCC's Special Services Division Chief said, "Simplex autopatch has within it the ability to be the end of Amateur Radio as we know it." He gave several reasons for the Commission's concern over the device: "The Commission's position on simplex autopatch is that it requires a separate control link regardless of the frequency it is used on. Beyond that, there are a variety of abuses that are associated with simplex autopatch, both by licensed Amateurs who want more out of Amateur Radio than they ought to have because of the capability that it gives you, and by non-licensed individuals who see what a great tool it is to turn Amateur Radio into another CB radio service." Kowalski noted that the popularity of new equipment brings more of it into the marketplace, with simpatch gear no exception, The more popular it gets,

the more that the equipment will proliferate as manufacturers bring to market that which sells." "My own personal position on this particular piece of gear is that you right now have a genie in a bottle. I hope that the bottle has not been opened to the extent that it's already out there. Before you open it and come to us and say that you love it and make this a way of life in Amateur Radio, I urge you to think it through. Because, I think it can change Amateur Radio irreversibly if it becomes popular and legal..." Kowalski noted that the matter is currently under consideration by a selection committee of the ARRL, and that the Commission is awaiting advice from it on this subject.

Westlink Report, August 10, 1984

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ARRL has signed a Memorandum of Understanding with the Federal Emergency Management Agency (FEMA). ARRL President Larry Price, W4RA, stopped in Washington August 3 for a brief ceremony in the office of FEMA Director Louis O. Giuffrida. The agreement is intended to "enhance the nationwide posture of emergency communications readiness for any conceivable emergency."

In the document, FEMA "recognizes that the ARRL is the principal organization representing the interests of more than 400,000 U.S. Radio Amateurs, and because of its organized emergency communications capability can be of valuable assistance in providing critical and essential communications during emergencies and disasters when normal lines of communications are disrupted."

On our part, ARRL recognized FEMA "as the Agency chartered as the central point of contact within the Federal Government for a wide range of emergency management activities in both peace and war time. FEMA is dedicated to working closely with all members of the emergency management community to achieve a realistic state of preparedness and an increased capacity to respond to emergencies of all types."

In addition to Price and Giuffrida, others present included Counsel Chris Imlay, N3AKD, and Perry Williams, W1UED, for ARRL; Samuel W. Speck, Associate Director, State and Local Programs and Support; Joseph F. Mealy, Chief, Emergency Management Systems Support Division; and Dr. Joseph H. Massa, Project Officer for FEMA. At the conclusion of the ceremony the League people were taken on a brief tour of the emergency operations control center at FEMA headquarters.

ARRL Letter, August 16, 1984

# EVENTS

Two big events are coming up near the end of this month. The weekend of September 29 and 30 will be the New England Division ARRL Convention, held once again at the Sheraton-Boxboro convention center. These conventions are always a lot of fun and give you a chance to look at all the new gear at the dealers and manufacturers booths, make a deal at the flea market, and learn something at the many forums and lectures. You should definately plan on making it one or both days.

The following Saturday, October 6 will be the fall Hosstrader's Swapfest at Deerfield, N.H. These are the biggest flea markets in New England so if you are looking to buy or sell or just meet lots of others hams, this is the place.

# ANNOUNCEMENT

Also coming up this month is the September ARRL VHF QSO Party. We will once again be traveling to Mt. Equinox in southern Vermont for an all out attack on the VHF, UHF, and microwave bands. The dates for this contest are September 8 and 9 though some will be going up as early as Friday evening and coming back as late as Monday. If you are interested in this event, contact one of the club officers.

# The Wellesley Amateur Radio Society

## MEMBERSHIP APPLICATION

Name: Call Sign:

Address: License Class:

City, State, Zip: ARRL Member?

Phone Number:

Which club activities do you plan to take part in?

VHF Contests (state which ones):

Message Fair

Field Day

Auction

Flea Market

Boston Marathon

S.E.T.

Public Service

Other:

What activities not listed would you like to see:

Do you have any special knowledge, equipment, etc., that would be the subject of a talk at a club meeting?

What do you want to get out of your club membership?

What are your special areas of interest in Amateur Radio?

Enclose $8.00 dues and mail to:

Wellesley Amateur Radio Society
211 Washington Street
Wellesley, Mass. 02181

# The Spark Gap

WELLESLEY AMATEUR RADIO SOCIETY

324 Washington Street
Wellesley Hills, Massachusetts 02181

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